



UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE
United States Patent and Trademark Office
Address: COMMISSIONER FOR PATENTS
P.O. Box 1450
Alexandria, Virginia 22313-1450
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/014,516	12/14/2001	Tomohiro Nakata	Q67231	3587

7590

03/08/2006

SUGHRUE, MION, ZINN, MACPEAK & SEAS, PLLC
2100 Pennsylvania Avenue, N.W.
Washington, DC 20037-3213

EXAMINER

KIM, SANG K

ART UNIT	PAPER NUMBER
----------	--------------

3654

DATE MAILED: 03/08/2006

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary	Application No.	Applicant(s)	
	10/014,516	NAKATA ET AL.	
	Examiner	Art Unit	
	SANG KIM	3654	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --
Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 10 August 2005 and 16 December 2005.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-6,9-12 and 18-21 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-6 and 9-12 is/are rejected.
- 7) ☒ Claim(s) 18-21 is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some * c) ☐ None of:
1. ☒ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- * See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date <u>6/29/05, 12/22/05</u> . | 6) <input type="checkbox"/> Other: _____ |

Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

Claims 1-6 and 9-12 are rejected under 35 U.S.C. 103(a) as being unpatentable over Yamauchi et al., U.S. Patent No. 4880175, in view of Kataoka, U.S. Patent No. 4238084.

With respect to claims 1-2 and 4-5, Yamauchi '175 teaches a method of winding a yarn using the apparatus as shown in figures 1-19, winding the yarn around a bobbin (i.e., a core or winding tube) at a low tension (t_1), then progressively increasing the tension of the yarn at a gradual predetermined rate until reaching a high tension (t_3), and thereafter winding the yarn under a tension which is being reduced from the high tension, as shown in figure 16.

Yamauchi '175 shows an automatic winder with the tension device to control the winding speed of a yarn and the like, see abstract.

Kataoka '084 shows a method of winding a sheet (i.e., a web).

It would have been obvious to one having ordinary skill in the art at the time the invention was made to modify the apparatus of Yamauchi '175 to wind a web as taught by Kataoka '084 to wind other different materials onto the device, thus not limiting the device to wind only one particular material such as yarn, as explained above.

With respect to claims 3 and 6, Yamauchi '175 teaches wherein winding tension is changed as the yarn layers increase which is caused by the amount of yarn.

As stated above, Yamauchi '175 in view of Kataoka '084 does not give a set of value with respect to the tension and the length of the yarn/web.

It would have been obvious to one having ordinary skill in the art at the time the invention was made to select the tension to correspond to the length as specified in the claims to ensure any material wound onto the core would not break under the high tension. Furthermore, it would have been obvious to one having ordinary skill in the art at the time the invention was made to set the low tension up to 15% of the length to which the web is to be wound, since it has been held that discovering an optimum value of a result effective variable involves only routine skill in the art. In re Boesch, 617 F.2d 272, 205 USPQ 215 (CCPA 1980).

With respect to claims 9 and 11, Yamauchi '175 teaches winding tension storing means (using a CPU 235), torque converting means (using an actuator 10), core rotation control means (using a control device 116), and winding a yarn using the apparatus as shown in figures 1-19, winding the yarn around a bobbin (i.e., a core or winding tube) at a low tension (t_1), then progressively increasing the tension of the yarn at a gradual predetermined rate until reaching a high tension (t_3), and thereafter winding the yarn under a tension which is being reduced from the high tension, as shown in figure 16, and as explained in column 4, lines 37-45, column 5, lines 34-46, and column 9, lines 25-30.

Art Unit: 3654

Yamauchi '175 shows an automatic winder with the tension device to control the winding speed of a yarn and the like, see abstract.

Kataoka '084 shows a method of winding a sheet (i.e., a web).

It would have been obvious to one having ordinary skill in the art at the time the invention was made to modify the apparatus of Yamauchi '175 to wind a web as taught by Kataoka '084 to wind other different materials onto the device, thus not limiting the device to wind only one particular material such as yarn, as explained above.

With respect to claims 10 and 12, as advanced above, Yamauchi '175 teaches a plurality of winding units (i.e., a plurality of webs and cores), see figure 1.

Allowable Subject Matter

Claims 18-21 are objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.

Response to Arguments

Claims 7-8 and 13-17 have been canceled.

Claims 18-21 have been added.

Applicant's arguments filed on 8/10/05 have been fully considered but they are not persuasive with respect to claims 1-6 and 9-12.

Applicant argues that the device of Yamauchi is used for winding a "yarn" as opposed to "sheet," and the sheets would not necessarily have the same tension

Art Unit: 3654

characteristics as the yarn. Therefore, applicant believes the sheets of Kataoka would not be wound around the 102 bobbin and removed along the same manner as the yarn of Yamauchi, and there is no teaching or suggestion that would have led one to believe that such tension aspects would be found when unwinding a "sheet" from a roll.

The examiner recognizes that obviousness can only be established by combining or modifying the teachings of the prior art to produce the claimed invention where there is some teaching, suggestion, or motivation to do so found either in the references themselves or in the knowledge generally available to one of ordinary skill in the art.

In this case, Yamauchi '175 provides some teaching, suggestion or motivation that other materials can be used since Yamauchi '175 recognizes the device can control the tension of a "yarn and the like." Thus, the device of Yamauchi can accommodate different materials. Kataoka '084 shows a method of winding a sheet. It would have been obvious to one having ordinary skill in the art at the time the invention was made to modify the apparatus of Yamauchi '175 to wind a web as taught by Kataoka '084 to wind other different materials onto the device, thus not limiting the device to wind only one particular material such as yarn.

Conclusion

THIS ACTION IS MADE FINAL. Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within

Art Unit: 3654

TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the mailing date of this final action.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to SANG KIM whose telephone number is 571-272-6947. The examiner can normally be reached Monday through Friday from 8:00 A.M. to 5:30 P.M. alternating Friday.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Kathy Matecki, can be reached on (571) 272-6951. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

SK

3/3/06



KATHY MATECKI
SUPERVISORY PATENT EXAMINER
TECHNOLOGY CENTER 3600